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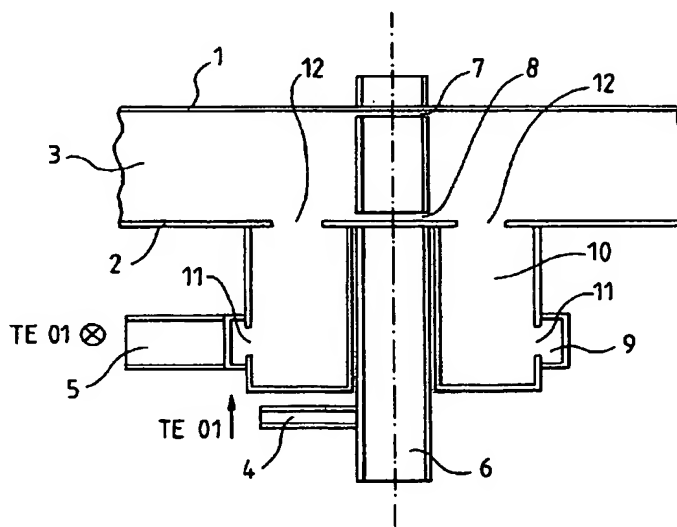
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(54) Title: **RLSA ANTENNA HAVING TWO ORTHOGONAL LINEAR POLARISATIONS**



(57) Abstract: The network antenna of the RLSA type in the form of a radial waveguide (3) has a feed structure allowing simultaneous excitation of the antenna in two orthogonal linear polarizations. The feed structure, essentially placed to the rear of the antenna, consists of a circular waveguide (6) placed at the centre of the radial waveguide and coupled to the latter by two circular slots (7, 8) for the excitation of the antenna in a first linear polarization and of a coaxial waveguide (10) surrounding the circular waveguide (6) and coupled to the radial waveguide (3) by radial slots (12), the coaxial waveguide (10) being excited by a ring-shaped waveguide (9) placed coaxially on the outer periphery of the coaxial waveguide and coupled to the latter by slots (11) distributed around the inner periphery of the ring for the excitation of the antenna in a second linear polarization orthogonal to the first linear polarization.